Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

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Item to be Added

1. Phase I, by January 1, 1995

Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

1. Copy of DTSC Notification and Certified Mail Receipt

Check Number

ONSITE HAZARDOUS WASTE TREATMENT NOTIFICATION FORM

FACILITY SPECIFIC NOTIFICATION

For Use by Hazardous Waste Generators Performing Treatment	K	Initia
Under Conditional Exemption and Conditional Authorization,		Revised
and by Permit By Rule Facilities	_	110.1500

Please refer to the attached Instructions before completing this form. You may notify for more than one permitting tier by using this notification form, DTSC 1772. You must attach a separate unit specific notification form for each unit at this location. There are different unit specific notification forms for each of the four categories and an additional notification form for transportable treatment units (TTU's). You only have to submit forms for the tier(s) that cover your unit(s). Discard or recycle the other unused forms. Number each page of your completed notification package and indicate the total number of pages at the top of each page at the 'Page of '. Put your EPA ID Number on each page. Please provide all of the information requested; all fields must be completed except those that state 'if different' or 'if available'. Please type the information provided on this form and any attachments.

The notification will not be considered complete without payment of the appropriate fee for each tier under which you are operating. (Please note that the fee is per TIER not per UNIT. For example, if you operate 5 units but they are all Conditionally Authorized, you only owe \$1,140, NOT 5 times \$1,140. If you operate any Permit by Rule units and any units under Conditional Authorization you owe \$2,280.) Checks should be made payable to the Department of Toxic Substances Control and be stapled to the top of this form. Please write your EPA ID Number on the check. Fill in the check number in the box above.

I. NOTIFICATION CATEGORIES

Indicate the number of units you operate in each tier. This will also be the number of unit specific notification forms you must attach. Conditionally Exempt Small Quantity Treatment operations may not operate units under any other tier.

Numbe	r of unit	s and attached u	unit specific notifications	i				Fee per Tier
A.		Conditionally Ex	kempt-Small Quantity Tre	atment (Form DT	SC 1772A)		(not per unit)
B.		Conditionally Ex	cempt-Specified Wastestre	am (Form DT	SC 1772B)		\$ 100
C.		Conditionally A	uthorized	(Form DT	SC 1772C)		\$1,140
D.		Permit by Rule		(Form DT	SC 1772D)		\$1,140 =======
	1	Total Number of	f Units				Total Fee	Attached \$1,140
П.	GENER	ATOR IDENTI	FICATION					
EPA ID	NUMBE	ER CA <u>D</u> 0 0 8	3 9 1 4 2 7	ВО	E NUMB	ER (if availal	ble) HGHQ3	6006117
(DBA-Do	(Compan ing Businer CAL LOC	y or Facility) ss As) CATION	Electronic Chrom 9132 Dice Road	e and Gr	inding	Company,	Inc.	
CITY			Santa Fe Springs		_ CA	ZIP _906	570 - 2589	For DTSC Use Only
COUNT	Y		Los Angeles					Region
CONTA	CT PER	SON	Mike (First Name)	Reed (Last Nam	s)	PHONE	NUMBER(31	0 946 _ 6671

MAILING ADDRESS, IF DIFFERENT:

СОМР	ANY N	AME (D	BA) Same As Facility Address
STREE	ET .		
CITY			STATE ZIP
COUN	TRY		(only complete if not USA)
CONT	ACT PE	ERSON	(First Name) (Last Name) PHONE NUMBER()
III.	TYPE	OF CO	MPANY: STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE:
Use eit			IC codes (a four digit number) that best describe your company's products, services, or industrial activity
Exampl			7384 Photofinishing lab 3672 Printed circuit boards
		First:	3471 Plating and Polishing Second: N/A
IV.	PRIO	R PERM	IT STATUS: Check yes or no to each question:
YES	NO		ar british yes of no to each question;
XX		1.	Did you file a PBR Notice of Intent to Operate (DTSC Form 8462) in 1992 for this location?
	ΚX	2.	Do you now have or have you ever held a state or federal hazardous waste facility full permit or interior
	(X)	3.	status for any of these treatment units? Do you now have or have you ever held a state or federal full permit or interim status for any other
	ΚX	4.	hazardous waste activities at this location? Have you ever held a variance issued by the Department of Toxic Substances Control for the treatment you
1771			are now notifying for at this location?
XX	Ļ	5.	Has this location ever been inspected by the state or any local agency as a hazardous waste generator?
v.	PRIOR	R ENFO	RCEMENT HISTORY: Not required from generators only notifying as conditionally exempt.
YES	NO		
	XX	orders	the last three years, has this facility been the subject of any convictions, judgments, settlements, or fina resulting from an action by any local, state, or federal environmental, hazardous waste, or public healthment agency?
		(For the	e purposes of this form, a notice of violation does not constitute an order and need not be reported unles not corrected and became a final order.)
		If you a	inswered Yes, check this box and attach a listing of convictions, judgments, settlements, or orders and a cop-

- VI. ATTACHMENTS:
- 1. A plot plan/map detailing the location(s) of the covered unit(s) in relation to the facility boundaries.
- 2. A unit specific notification form for each unit to be covered at this location.
- VII. CERTIFICATIONS: This form must be signed by an authorized corporate officer or any other person in the company who has operational control and performs decision-making functions that govern operation of the facility (per title 22, California Code of Regulations (CCR) section 66270.11). All three copies must have original signatures.

Waste Minimization I certify that I have a program in place to reduce the volume, quantity, and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

<u>Tiered Permitting Certification</u> I certify that the unit or units described in these documents meet the eligibility and operating requirements of state statutes and regulations for the indicated permitting tier, including generator and secondary containment requirements. I understand that if any of the units operate under Permit by Rule or Conditional Authorization, I will also be required to provide required financial assurances by January 1, 1994, and conduct a Phase I environmental assessment by January 1, 1995.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are substantial penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Mike Reed	Vice President, General Manager		
Name (Print or Type)	Title		
Mile Reed	3-31-93		
	Date Signed		

OPERATING REQUIREMENTS:

Please note that generators treating hazardous waste onsite are required to comply with a number of operating requirements which differ depending on the tier(s) under which one operates. These operating requirements are set forth in the statutes and regulations, some of which are referenced in the Tier-Specific Factsheets.

SUBMISSION PROCEDURES:

You must submit two copies of this completed notification by certified mail, return receipt requested, to:

Department of Toxic Substances Control Form 1772 Onsite Hazardous Waste Treatment Unit 400 P Street, 4th Floor (walk in only) P.O. Box 806 Sacramento, CA 95812-0806.

You must also <u>submit one copy</u> of the notification and attachments to the local regulatory agency in your jurisdiction as listed in the instruction materials. You must also retain a copy as part of your operating record.

All three forms must have original signatures, not photocopies.

CONDITIONALLY AUTHORIZED

UNIT SPECIFIC NOTIFICATION (pursuant to Health and Safety Code Section 25200.3)

UNIT	NAME	Chrome Reduction Unit UNIT ID NUMBER 001
NUM	BER OF	TREATMENT DEVICES: 10 Tank(s) 0 Container(s)
Each i	init must The num	be clearly identified and labeled on the plot plan attached to Form 1772. Assign your own unique number to each ber can be sequential (1, 2, 3) or you may use any system you choose.
Enter i	the estim Lin any n	ated monthly total volume of hazardous waste treated by this unit. This should be the maximum or highest amount month. Indicate in the narrative (Section II) if your operations have seasonal variations.
I.		TESTREAMS AND TREATMENT PROCESSES:
	Estima	ated Monthly Total Volume Treated: N/A pounds and/or 1,500 gallons
		llowing are the eligible wastestreams and treatment processes. Please check all applicable boxes:
1.	Aqueo: 66261.	us wastes hazardous solely due to inorganics constituents, except asbestos, listed in title 22, CCR, section 24(a)(1)(B) or (a)(2)(A) and which contain less than 1,400 ppm total of these constituents. (There is no volume limit s wastestream.) Treatment is using:
, l u k	a.	Phase separation, including precipitation, by filtration, centrifugation, or gravity settling, including the use of demulsifiers and flocculants.
	b.	Ion exchange, including metallic replacement,
	c.	Reverse osmosis
	d.	Adsorption
	e.	pH adjustment of aqueous waste with a pH of between 2.0 and 12.5
	f.	Electrowinning of solutions, unless those solutions contain hydrochloric acid
Ω k	g.	Reduction of solutions hazardous solely due to hexavalent chromium, to trivalent chromium with sodium bisulfite, sodium metabisulfite, sodium thiosulfate, ferrous chloride, ferrous sulfate, ferrous sulfate, or sulfur dioxide. The solution contains less than 750 ppm of hexavalent chromium.
2.	Aqueou which c using:	is wastes hazardous solely due to organic constituents listed in title 22, CCR, section 66261.24(a)(1)(B) or (2)(B) and contain less than 750 ppm total of these constituents. (There is no volume limit for this wastestream.) Treatment is
	a.	Phase separation by filtration, centrifugation, or gravity settling, but excluding super critical fluid extraction.
	b.	Adsorption
3.	for dusts	resulting from wastewater treatment, dusts, solid metal objects, and metal workings which are hazardous solely due resence of constituents, except asbestos, listed in title 22, CCR, section 66261.24(a)(1)(B) or (a)(2)(A) and which, s only, contain less than 750 ppm total of these constituents. The monthly volume treated in this unit does not exceed allons or 45,000 pounds. Treatment is using:
	a.	Physical processes which constitute treatment only because they change the physical properties of the waste, such as filtration, centrifugation, gravity settling, grinding, shredding, crushing, or compacting.
	ъ.	Drying to remove water.
	c.	Separation based on differences in physical properties, such as size, magnetism, or density.

CONDITIONALLY AUTHORIZED

UNIT SPECIFIC NOTIFICATION

(pursuant to Health and Safety Code Section 25200.3)

4.	Alum. or 45,0	gypsum, lime, sulfur, or phosphate sludges. The monthly volume treated in this unit does not exceed 5,000 gallons 000 pounds. Treatment is using:
	a.	Drying to remove water.
	ь.	Phase separation by filtration, centrifugation, or gravity settling.
5.	and wh	wastes listed in title 22, CCR, section 66261.120 that meet the criteria in title 22, CCR, section 66261.122 which rdous solely due to the constituents, except asbestos, listed in title 22, CCR, section 66261.24(a)(1)(B) or (a)(2)(A) ich contain less than 750 ppm total of these constituents. The monthly volume treated in this unit does not exceed callons or 45,000 pounds. Treatment is using:
	a.	Drying to remove water.
	b.	Phase separation by filtration, centrifugation, or gravity settling.
	c.	Screening to separate components based on size.
	đ.	Separation based on differences in physical properties, such as size, magnetism, or density.
6.	less tha	wastes classified under title 22, CCR, section 66261.124 as special wastes, except asbestos, which is hazardous solely the constituents, except asbestos, listed in title 22, CCR, section 66261.24(a)(1)(B) or (a)(2)(A) and which contain 750 ppm total of these constituents. The monthly volume treated in this unit does not exceed 5,000 gallons or pounds. Treatment is using:
	a.	Drying to remove water.
	b.	Phase separation by filtration, centrifugation, or gravity settling.
	c.	Magnetic separation.
7.	Soils co does no	ntaminated with metals listed in title 22, CCR, section 66261.24 (a)(2)(A). The monthly volume treated in this unit texceed 5,000 gallons or 45,000 pounds. Treatment is using:
	a.	Screening to separate components based on size.
	b.	Magnetic separation.
8.	Oil mix	ed with water and oil/water separation sludges. (There is no volume limit for this wastestream.) Treatment is using:
	a.	Phase separation by filtration, centrifugation, or gravity settling, but excluding super critical fluid extraction, including the use of demulsifiers and flocculants. Heat can be used, but must not exceed 160 degrees Fahrenheit.
	b.	Separation based on differences in physical properties, such as size, magnetism, or density.
	c.	Reverse osmosis.
9.	Neutrali in eleme	zation of acidic or alkaline wastes, hazardous solely due to corrosivity or toxic only from the acid or caustic material, entary neutralization units. (There is no volume limit for this wastestream.)
	a.	The waste contains less than 10 percent acid or base constituents by weight. There is no volume limit for this category.
	b.	The waste contains 10 percent or more acid or base constituents by weight and is treated in batches that do not exceed 500 gallons at one time.

DTSC 1772C (1/93)

CONDITIONALLY AUTHORIZED

UNIT SPECIFIC NOTIFICATION

(pursuant to Health and Safety Code Section 25200.3)

11.	(These solution	Spent cleaners and conditioners which are hazardous solely due to copper or copper compounds with less than 5000 pp copper. The volume limit for conditional authorization is 1,000 gallons of this wastestream per facility in any calendar mont (These cleaners are limited to surfactants and detergents and do not contain microetch, etchant, plating or metal strippi solutions or solutions containing oxidizers, or any cleaner based on organic solvents). (These wastestreams and process are only conditionally authorized until January 1, 1995, unless extended by the Department.) Treatment is using:					
	a.	Phase separation, including precipitation, by filtration, centrifugation, or gravity settling, including the use demulsifiers and flocculants.					
	b.	Ion exchange, including metallic replacement,					
	c.	Reverse osmosis					
	d.	Adsorption					
	e.	pH adjustment of aqueous waste with a pH of between 2.0 and 12.5					
	f.	Electrowinning of solutions, unless those solutions contain hydrochloric acid					
п.	NARE	RATIVE DESCRIPTIONS: Provide a brief description of the specific waste treated and the treatment process used.					
	1.	SPECIFIC WASTE TYPES TREATED: Hexavalent chrome reduction					
	2.	TREATMENT PROCESS(ES) USED: pll adjustment, chrome reduction, coaquilation/ flocculation, gravity Settling, and filter press					
ш.	RESII	DUAL MANAGEMENT: Check Yes or No to each question as it applies to all residuals from this treatment unit.					
YES	NO [X]	1. Do you discharge non-hazardous aqueous waste to a publicly owned treatment works (POTW)/sewer?					
	(X)	2. Do you discharge non-hazardous aqueous waste under an NPDES permit?					
ΚX		3. Do you have your residual hazardous waste hauled offsite by a registered hazardous waste hauler? If you do, where is the waste sent? Check all that apply.					
		a. Offsite recycling					
		Thermal treatment					
		d. Further treatment					
	XX	4. Do you dispose of non-hazardous solid waste residues at an offsite location?					
	ΚX	5. Other method of disposal. Specify: Reuse wastewater					

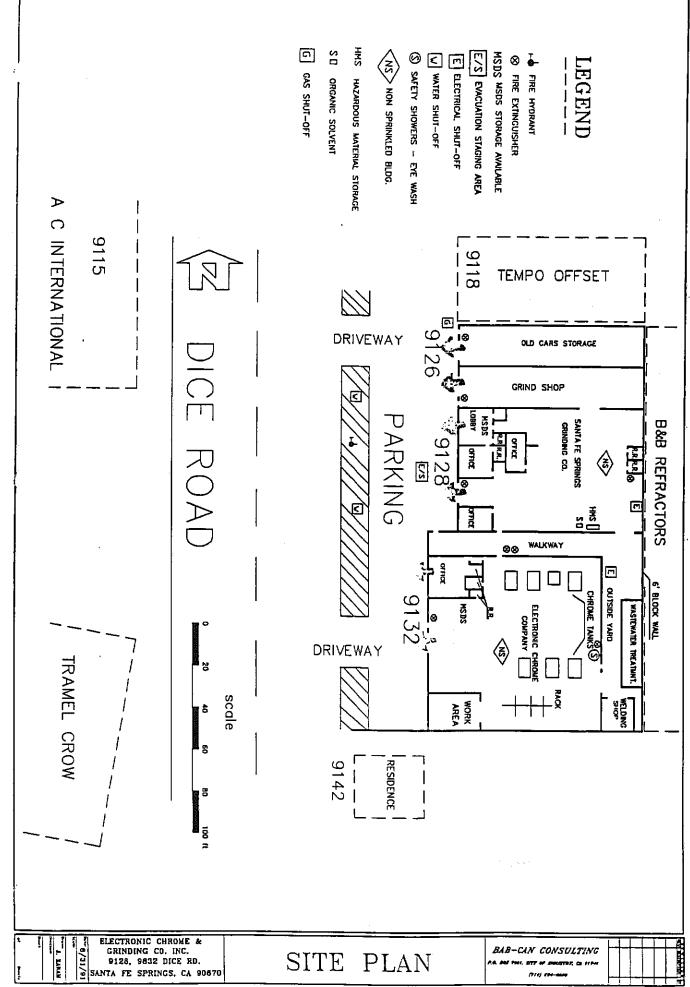
CONDITIONALLY AUTHORIZED UNIT SPECIFIC NOTIFICATION (pursuant to Health and Safety Code

IV. BASIS FOR NOT NEEDING A FEDERAL PERMIT:

In order to demonstrate eligibility for one of the onsite treatment tiers, facilities are required to provide the basis for determining that a hazardous waste permit is not required under the federal Resource Conservation and Recovery Act (RCRA) and the federal regulations adopted under RCRA (Title 40, Code of Federal Regulations (CFR)).

Choose the reason(s) that describe the operation of your onsite treatment units:

(X	1.	The hazardous waste being treated is not a hazardous waste under federal law although it is regulated as a hazardous
		waste under California state law.
	2.	The waste is treated in wastewater treatment units (tanks), as defined in 40 CFR Part 260.10, and discharged to a publicly owned treatment works (POTW)/sewering agency or under an NPDES permit. 40 CFR 264.1(g)(6) and 40 CFR 270.2.
	3.	The waste is treated in elementary neutralization units, as defined in 40 CFR Part 260.10, and discharged to a POTW/sewering agency or under an NPDES permit. 40 CFR 264.1(g)(6) and 40 CFR 270.2.
XX	4.	The waste is treated in a totally enclosed treatment facility as defined in 40 CFR Part 260.10; 40 CFR 264.1(g)(5).
	5.	The company generates no more than 100 kg (approximately 27 gallons) of hazardous waste in a calendar month and is eligible as a federal conditionally exempt small quantity generator. 40 CFR 260.10 and 40 CFR 261.5.
	6.	The waste is treated in an accumulation tank or container within 90 days for over 1000 kg/month generators and 180 or 270 days for generators of 100 to 1000 kg/month. 40 CFR 262.34, 40 CFR 270.1(c)(2)(i), and the Preamble to the March 24, 1986 Federal Register.
	7.	Recyclable materials are reclaimed to recover economically significant amounts of silver or other precious metals. 40 CFR 261.6(a)(2)(iv), 40 CFR 264.1(g)(2), and 40 CFR 266.70.
	8.	Empty container rinsing and/or treatment. 40 CFR 261.7.
	9.	Other: Specify:
V.	TRAN	ISPORTABLE TREATMENT UNIT: Check Yes or No. Please refer to the instructions for more information.
YES	NO	
	X	Is this unit a Transportable Treatment Unit?
		If you answered yes, you must also complete and attach Form 1772E to this page.
		The Tier-Specific Factsheets contain a summary of the operating requirements for this category. Please review those requirements carefully before completing or submitting this notification package.



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Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

2. Written Unit Operating Instructions (KRC Manual)



1571 S. Sunkist, Unit K Anaheim, CA 92806 714/939-6357 Fax 714/939-6359

ELECTRONIC CHROME

CHROME PRECIPITATION AND EVAPORATION SYSTEM

OPERATION

and

MAINTENANCE MANUAL



Principles of Operation

The concentrated waste from the Acid Strip Tank is collected in the Waste Storage Tank. This waste is predominantly acidified Tri-Chrome. Any waste from inside the shop shall be predominantly acidified Hex-Chrome. This should also be collected in the Waste Storage Tank. Mixing the two, Tri-Chrome and Hex-Chrome will aid in breaking up any Dichromate complexes.

This collected waste solution is then "metered" into the T-3 Neutralization Tank at a nominal .25 GPM (appx. 120 gallons per day on an 8 hour day). In T-3 Magnesium Hydroxide is added, automatically controlled by the Kruger & Eckels pH Controller. This adjusts the pH and starts the precipitation process. This Controller is set for a pH of 6.0. Since the Mag Hydroxide is a very slow reacting material, you'll notice "spikes" up to 8 and 8.5 due to the "reaction time vs. the flow" through the tank. This is perfectly acceptable and has been allowed for in the System set-up.

The solution then gravity flows into the Neutralization Tank. Here Sodium Hydroxide and Sodium Hydrosulfite are added, again automatically controlled by a Kruger & Eckels pH Controller (for the Sodium Hydroxide) and Kruger & Eckels Controller (for the ORP Sodium The Sodium Hydrosulfite is available to Hydrosulfite). reduce any Hex-Chrome to the Tri state. This controller is set for +70 Mv. Readings above +70 Mv. denote the presence of Hex-Chrome and regulate the chemical additions. Sodium Hydroxide is set for a pH of 8.0 to 8.5. This is the optimum pH for precipitation of the Heavy Metals in solution. The availability of this chemical addition is only in case the Mag Hydroxide does not respond fast enough to reach this pH prior to the solution flowing to the Polymer stages.

The next two stages are the Polymer Flash Mix Tank and the Polymer Flocculation Tank. In the Polymer Flash Mix, Anionic Polymer is added to build up the particle size for effective settling. This stage has an Air Sparger for mixing of the Polymer throughout the entire solution. This agitation should be "Moderate" to "Mild" for effective mixing. In the Polymer Flocculation Tank, the continued agitation allows for complete contact of the Heavy Metal particles with the Polymer allowing the building of the largest possible particle size. Again, there is an Air

Sparger for mixing. The agitation in this tank must be "Mild". Excessive agitation will break the particles into smaller sizes and reduce the effectivity of the Clarifier.

After Polymerization and Flocculation, the solution flows through the Two Stage Clarifier. Here the large Heavy Metal particles are allowed to gravity settle into the cone bottoms. The clarified liquid then flows through the Clarifier Weir Drain and is returned to the Recycle Tank. Clarified solution in the Recycle Tank is then pumped back to the T-3 Neutralization Tank for dilution of the concentrated waste solution.

Sludge build-up in the cone bottoms of the Clarifier is then pumped through the Filter Press for dewatering and solidification. The dried sludge from the filter press may be disposed of to a Solid Waste Disposal Station or sent out for reclamation of the Chrome. Filtrate from the filter press is returned to the first stage of the Clarifier.

The Evaporator has two functions. First is to evaporate the excess clarified solution that is added to the System from the concentrated waste and reagent chemicals. The second function is to Evaporate clarified solution to reduce the "Salt" build up from the treatment process. This unit is equipped with an automatic liquid level controlled "Fill Pump". This pump automatically draws solution from stage one of the Clarifier when the liquid level reaches approximately 6" above the heater tubes and then shuts-off at approximately 6" below the top of the tank. As concentrated "Salt" solution is built up in the bottom of the Evaporator, periodically this solution should be processed through the filter press to strip the solids.

Start-up and Operation of the Chrome Precipitation System

The System has been initially set-up and adjusted to achieve the proper waste concentrate dilution flow rates and chemical additions. The two most important set-ups are the Recycle Pump and the Waste Solution Metering Pump. The recycle pump is a Wilden Model M-2 Diaphragm Pump and should be adjusted to a nominal 100 to 110 strokes per minute. At a displacement of .1 gallons per stroke, this equates to the required 10 GPM recirculation rate. The Waste Solution Metering Pump is a LMI Model D-141-34 with a capacity of 20 GPH. This pump should be set at a Stroke and Speed of 70 to achieve the desired .25 GPM.

The Mag Hydroxide Recycle Pump is also a Wilden Model M-2 Diaphragm Pump and should be adjusted to a nominal 50 to 60 strokes per minute. At displacement of .1 gallons per stroke, this equates to a 5 GPM recirculation rate.

The Sodium Hydrosulfite Pump, the Sodium Hydroxide Pump, and the Polymer Pump are all LMI Model B-131-71T and B-131-74 Metering Pumps. These three pumps need to be adjusted to achieve the optimum the reaction of their respective chemical reagents.

When starting the system be sure the Main Air Valve, all Individual Air Valves, the Water Valve, the Mag Storage Tank Shut-off Valve, and all of the Flow Piping Valves are open. Initial start-up consists of the following steps:

- Turn on the Control Power Switch. This shall light up the Control Power Available Light.
- 2. Turn on the **Power** and **Set Point Power** Toggle Switches on each of the three Kruger and Eckels Controllers. The **Set Point Power** Toggle Switches shall automatically operate the Sodium Hydroxide and Sodium Sulfite Metering Pumps and the Gemu Mag Injection Valve in response to the Set Point settings on the Controllers.
- 3. Turn the Mag (OH)₂ Mixer 3 Switch to Auto. This will cycle the mixer on for approximately five minutes of each hour to prevent over mixing and thickening of the Mag Hydroxide solution. When the mixer is in operation the Mag(OH)₂ Mixer in Operation Light shall come on.

If the System has been off for more than One Day (24

hours), turn the Mag (OH) Mixer 3 Switch to On for at least five minutes. This will agitate settled Mag Hydroxide in the Mag Storage Tank preventing clogging of the Mag Recirculating Pump. After five minutes set the Mag (OH) Mixer 3 Switch to Auto.

- 4. Turn on the Mag (OH) Recirculation Pump Switch. This shall light up the Mag (OH) Recirculation Pump P3 in Operation Light and start the Mag Hydroxide recirculating.
- 5. Turn on the Neutralization Mixer in T4 and T3 Switches. Their respective In Operation Lights shall light up and the mixers shall start agitation of the Neutralization tanks.
- 6. Turn on the Flow Control System Switch. The Flow Control System Activated Light shall illuminate and the M-2 Recycle Pump, the Waste Solution Metering Pump, and the Polymer Metering shall all activate. Since these three Pumps are all on a common operation switch, should individual On/Off control be required, each individual unit has its own circuit breaker inside the Control Cabinet.

Shut down of the System down consists of the following steps:

- Turn off the Flow Control System Switch.
- 2. Turn the Mag (OH)₂ Recirculation Pump Switch to Off/Flush. Allow at least five minutes for the automatic water flush to complete its cycle.

This procedure is very important. If the Mag Recirculating Pump and piping are not properly flushed, it could result in Mag Hydroxide settling in the pump and/or piping and clogging the recirculation function.

- Turn off the Mag (OH)₂ Mixer 3 Switch and Neutralization Mixer in T4 and T3 Switches.
- 4. After the five minutes delay for Mag (OH)₂
 Recirculation Pump Off/Flush cycle, the turn off the
 Control Power. This shall automatically turn off the
 Kruger & Eckels Controllers and the respective Metering
 Pumps.

5. Close the Main Air Valve, all Individual Air Valves, the Water Valve, the Mag Storage Tank Shut-off Valve, and all of the Flow Piping Valves.

Operation of the Evaporator

The Evaporator functions based upon the heating the solution to boiling, and atmospheric discharge of the steam with a blower. The unit is equipped with an air sparger to accelerate the evaporation process. The unit has an evaporation capacity of 120 to 150 gallons per day (8 hours). The Evaporator draws solution from Stage 1 of the Clarifier and should be operated simultaneously with the Chrome Precipitation System to prevent overflowing of the Recycle Tank. The Fill Pump is a Wilden Model M-1 Diaphragm Pump and should be adjusted to approximately 50 to 60 strokes per minute. At a displacement of .018 gallons per stroke this equates to an approximate 1 GPM fill rate.

Additional operation of the Evaporator while the Chrome Precipitation System is off is recommended to reduce the "Salt" build-up in the recycled solution. A mechanical Float Valve, connected to a fresh water supply, will add clean make-up water to the Recycle Tank as required.

When operating the Evaporator while the Chrome Precipitation System is off, be sure not to draw the liquid level in the Clarifier below the pick-up pipe for the Fill Pump. This could result in a Low Level Condition in the Evaporator. Also, do not allow the sludge to build up in the Clarifier to a level where sludge is picked up by the Fill Pump and transferred into the Evaporator.

To initially load Evaporator be sure to open the flow valves on the Wilden M-1 Fill Pump and open the shut-off valves on the air supply pipe. Start-up consists of the following steps:

- 1. Turn on the Control Power Switch.
- Program the D15D Temperature Controller to 2120 F (refer to enclosed DM15D Instruction Manual).
- Turn on the Air Solenoid Switch. Note, this unit has an Internal Safety Interlock function that prevents the

Heaters from being activated when this switch is Off. This helps prevent over heating and damage to the heater elements.

- 4. Turn on the Blower Switch.
- 5. Turn on the Heater 1 and Heater 2 Switches, and press the Start 1 and Start 2 Push Button Switches. Note, this unit is equipped with an Internal Liquid Level Control function that both cycles the Automatic Fill process and shuts off the Heaters in case of a Low Level Condition. Should a low level condition occur, the Low Level Warning Lights on the Control Panel shall illuminate. The Heaters can not be reactivated until the low level condition has been corrected, and the Start Push Button Switches are pressed.

Shut-down of the Evaporator consists of the reverse of the Start-up procedure, with the exception of programming the DM15D Temperature Controller.

An additional safety function which is built in to the Heaters/Heating System consists of a Protector II Circuit which monitors the temperature of the Heater Tubes. In the event of an Over Temperature Condition, the P-II Circuit will shut off the heaters and sound an alarm. This condition is normally the result of a Low Liquid Level Condition. Once the condition has been corrected and the Heater Tubes have cooled down, the Heaters may be reactivated by pressing the Start 1 and Start 2 Push Button Switches.

After several Fill Cycles have been evaporated, a thick "Salt" laden solution shall collect in the sloped bottom of the Evaporator Tank. When the liquid level in the Evaporator has Almost reached the Fill Cycle Level, this solution should be processed through the Filter Press through the use of the Evaporator Bottom Drain Valve. When draining the Evaporator through the Filter Press, be sure to follow the following procedures:

- 1. Process solution from the Evaporator through the Filter Press after a load of sludge from the Clarifier has been started. A partially loaded Filter Press is much more effective at stripping the Salts from the Evaporator solution than a clean one.
- 2. Allow the solution in the Evaporator to Cool Off to

- Ambient prior to opening the Bottom Drain Valve. Failure to cool the solution can result in damage to both the piping and the Filter Press.
- 3. Be sure the Bottom Drain Valves on the Clarifier are Closed. Failure to Close these Valves can cause the solution to equalize between the Evaporator and the Clarifier causing the Evaporator to overflow.

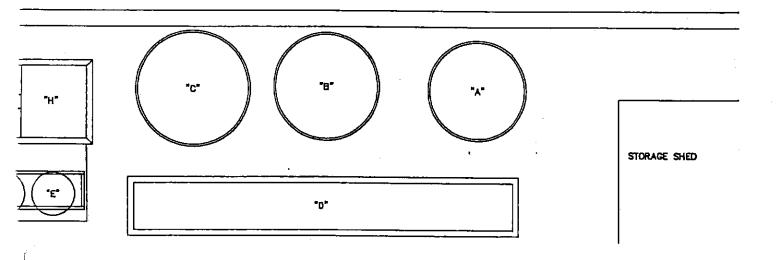
Chemical Make-up and Maintenance

Reagent chemicals and their make-up are as follows:

- 1. Mag 50 Magnesium Hydroxide Liquid (as shipped by Hill Bros. Chemical in bulk).
- Sodium Hydrosulfite Powder Mix 1/2 Lb.of the powder per Gallon of Water.
- 3. Sodium Hydroxide 50% Liquid (as shipped by the chemical supplier).
- Aqua Ben 445L Anionic Polymer Liquid Mix 1 Gallon of Polymer per 5 Gallons of Water.

Maintenance should consist of the following procedures:

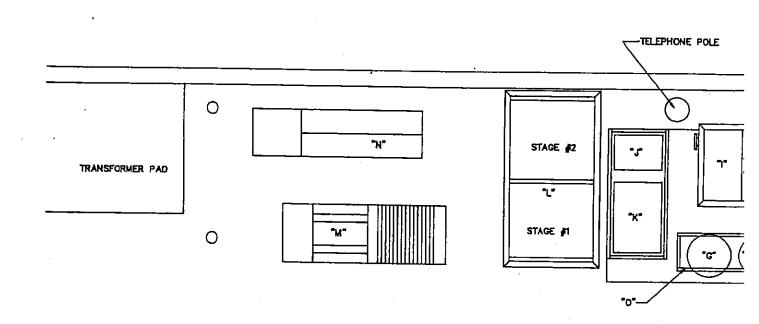
- 1. Keep the Air Line Lubricators on the Chrome Precipitation System and the Filter Press filled with a Non-Detergent 10W Hydraulic Oil.
- Clean the Air Line Filters weekly. Do not allow the Compressed Air to build up a water content which will get past the Air Line Filters and into the System Air Line Piping. Should this situation occur, and Air Line Dryer should be installed on the main air line to the System.
- 3. Lubricate the Gear Reduced Mixers according to the manufacturer recommendation (see enclosed Mix Mor Mixer Service Manuals).
- 4. Clean and Calibrate the Kruger & Eckels Controller Electrodes at least Quarterly (refer to the enclosed Model 438 Controller Instruction Manuals).
- 5. For detailed operating and maintenance of the Filter Press, refer to the enclosed Cal Press MC 25 Manual.

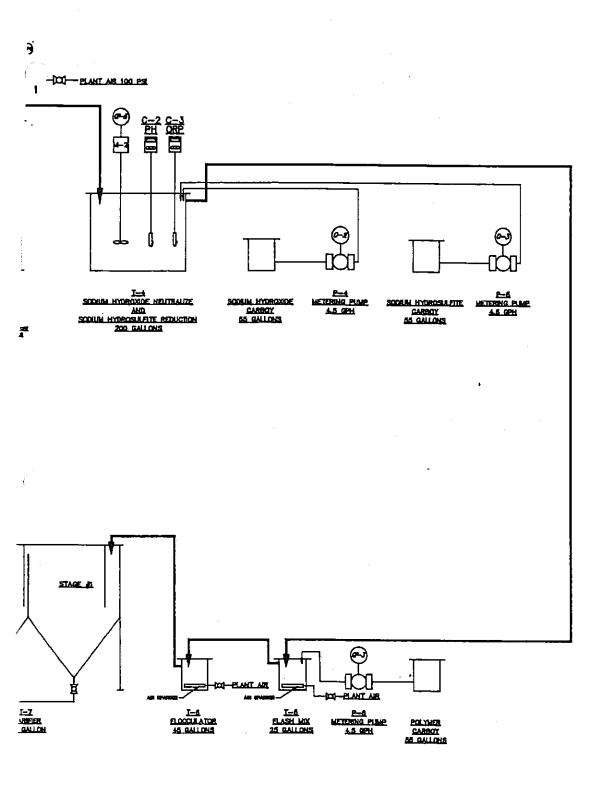


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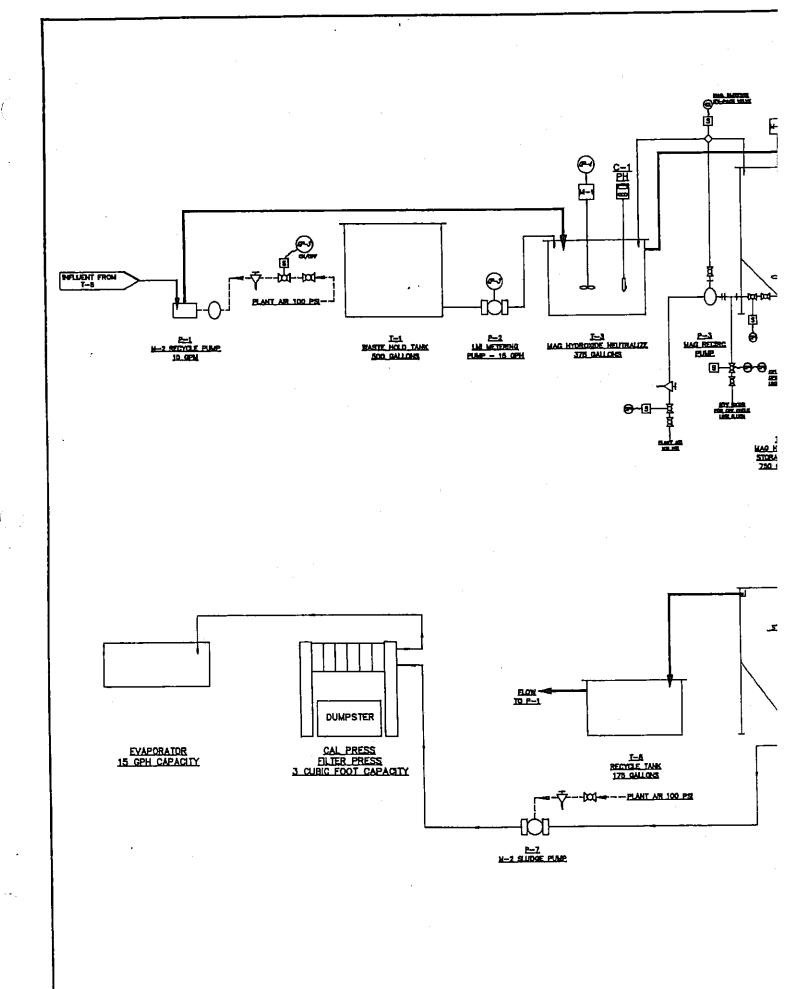
- "A" HOL STORAGE (EXISTING)
- "B" WASTE HOLD (500 GALLONS)
- "C" MAG HYDROXIDE STORAGE (750 GALLON)
- "D" CHROME STRIPPER TANK (EXISTING)
- "E" CAUSTIC DRUM (55 GALLON)
- "F" SODIUM HYDROSULFITE DRUM (55 GALLON)
- "G" POLYMER DRUM (55 GALLONS)
- "H" MAG HYDROXIDE NEUTRALIZE
- "I" CAUSTIC & SODIUM HYDROSULFITE
- "J" POLYMER FLASH MIX
- "K" FLOCCULATOR
- "L" CLARIFIER
 - CL-3, STAGE #1, 500 GALLON
 - CL-4, STAGE #2, 500 GALLON
- "M" 3 CUBIC FOOT FILTER PRESS
- "N" SAMSCO 15 GPH
- "O" CONTROL CENTER

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Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

3. Written Inspection Schedules and Log

Electronic Chrome & Grinding Company, Inc. Written Inspection Schedules and Log

Pursuant to 22 CCR 66265.15, areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the items and frequencies called for in sections 66265.174, 66265.193, 66265.195, 66265.226, 66265.347, 66265.377, 66265.403, 66265.1033, 66265.1052, 66265.1053, and 66265.1058. However, only subsections 174, 195, and 266 are applicable to Electronic Chrome. Subsection 347 is regulating incineration process; subsection 377 is regulating thermal treatment and subsections 403, 1033, and 152 are written specifically for RCRA hazardous waste.

The frequency of inspection for the items specified in subsection 174, 195, and 266 is summarized in the following table.

Regulatory Citation	Item	Minimum Frequency
22CCR66265.195	Overfill/Spill Control Equipment	Daily
22CCR66265.266	Freeboard Level	Weekly

KRC Associates, Inc. designed and installed the wastewater treatment system for Electronic Chrome. The designed capacity for the holding tank was 110% of the wastewater volume plus 4 inches of rainfall. The storage capacity meets SARA requirements. Therefore, liquid level monitor and other overfill/spill control devices were not equipped. Thus, the inspection on the control devices are not included in the inspection schedule.

The wastewater treatment area is approximately 12 feet by 40 feet. Containment is provided as required around the on-site wastewater treatment facility. The curb was 8 inches wide and 8 inches high. The containment area has capacity to hold 150% of the contents of the largest tank.

In addition to the aforementioned inspection item, several safety equipments are required to be included in the inspection schedule. Equipments, structures, areas to be considered for inclusion in an inspection schedule are listed in the following table:

Safety Equipment	 Emergency Shower/Eyewash Protective Glasses Disposable Respirators First Aid/Equipment Supplies Warning Signs 	Emergency Equipment	 Fire Extinguishers Fire Alarm System Portable Pumps/Hose Absorbents
Areas	Loading AreaUnloading AreaStorage AreaMain Roadways	Security Equipment	• Signs • Locks
Secondary Containment Structures	Berms Tank Supports	Communication Equipment	 Telephones Radios Intercoms Public Address System

The inspection schedules for each equipment categories are inspected as follows:

SAFETY EQUIPMENT

- Check emergency shower/eyewash for proper working condition by turning on the valve and recording the condition on the inspection log.
- Observe protective glasses and disposal respirators for signs of deterioration, corrosion, or dirt build-up that might prevent a normal protection function.
- Check first air/equipment supplies for expiration date. Order substitute items if they expire.
- Observe warning signs for visibility. Clean the signs if necessary.

WORKING AREA

- Work around the loading area, unloading area, storage area, and main roadways looking for accumulation of dirt and dust. Clean the area if necessary.
- Observe filter cake dumpster for sign of releases. Cover the dumpster whenever possible.

EMERGENCY EQUIPMENT

- Check fire extinguishers expiration date by observation or check gauge on fire extinguisher for pressure in acceptable range. Change the content if necessary.
- Check the alarm system by turning on the switch. Repair if not working.
- Observe the absorbents for good working conditions.

SECURITY EQUIPMENT

 Check signs and locks for good working conditions. Repair or change them if necessary.

COMMUNICATION EQUIPMENT

· Check the telephones, radios, intercoms, and public address system by regular use.

SECONDARY CONTAINMENT STRUCTURES

• Walk around the berms and tank supports, looking for cracks and signs of release (that is wet spots, dead vegetation, etc.). Check the exterior of tanks for signs of rust or corrosion.

Within the last three years, Electronic Chrome & Grinding Company, Inc. has not been the subject of any convictions, judgements, settlements, or final orders resulting from an action by any local, state, or federal environmental, hazardous waste, or public health enforcement agency.

WEEKLY INSPECTION LOG

	_	Condition	
Inspection Item			No
Safety Equipment	Emergency shower/eyewash in good working condition?		
	Protective glasses/disposable respirators free of signs of deterioration?		
	First aid/equipment supplies not expired?		
	Warning signs have good visibility?		
Working Area	Loading/unloading/storage/main roading areas free of dirt accumulation?		·· <u>·</u>
	Filter cake dumpster free of signs of corrosion/leakage?		
Emergency Equipment	Fire extinguishers/fire alarm system in good working condition?		
	Absorbents in good working condition?		
Security Equipment	Signs/locks in good condition?		
Community Equipment	Telephones/radios/intercoms/public address system in good working condition?		
Secondary Containment	Berms/tank supports free of cracks/deterioration?		
Structure	Berms free of accumulated liquids?		-

Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

4. Contingency Plan and Business Plan

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

FOR

ELECTRONIC CHROME & GRINDING CO. INC.
9128-32 DICE RD.
SANTA FE SPRINGS, CA 90670

(310) 946-6671

MARCH 1992

CALIFORNIA CODE OF REGULATIONS
TITLE 22
DIVISION 4.5
CHAPTER 15
ARTICLES 3 & 4, and
SECTION 66265.16

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ELECTRONIC CHROME & GRINDING CO. SANTA FE SPRINGS, CA.

CONTINGENCY PLAN

PURPOSE

ELECTRONIC CHROME & GRINDING CO. has developed a hazardous waste contingency plan to minimize hazard to human health or the environment from fires, explosions, or any sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil surface, and water. The provision of the plan will be carried out immediately whenever there is a fire, explosion, or release of hazardous waste constituents which could threaten human health or the environment.

SECTION 1. FACILITY DESCRIPTION

Type of Facility:

Hard Chrome Plating & Grinding Facility

EPA ID. Number:

CAD 008-391-427

Address:

9128-32 Dice Rd.,

Santa Fe Springs, CA 90670

Location:

North of Los Nietos Rd. and South of

Slauson Avenue

Thomas Guide Page Number - 706,

Intersection of J and 2.5

County:

Los Angeles

Telephone Number:

(310) 946-6671

Fax Number

(310) 946-6671

Owner/Operator:

Philip W. Reed

Mailing Address:

9128-32 Dice Rd.

Santa Fe Springs, CA 90670

Contact:

Mike Reed

Business Telephone #:

(310) 946-6671

Residence Address:

FX-6: Personal Privacy

Residence Telephone #:

Electronic Chrome & Grinding Co. is located at 9128-32 Dice Rd. Santa Fe Springs, CA 90670

From the 605, San Gabriel River Freeway exit at Slauson Ave. and turn right (south) onto Pioneer and proceed to Slauson Ave. turn left (east) on Slauson Ave. and proceed approximately one mile to Dice Rd. turn right (south) onto Dice Rd. and proceed across railroad tracks approximately 3/4 of a mile. Our facility is on the left (east) side of the street just north of Los Nietos Rd.

SECTION 2. GENERATION OF HAZARDOUS WASTE

Hard chrome plating is the process by which chromium, a very hard non-reactive, slippery metal is applied to the surface of other metals to improve their durability, strength, rust resistance and coefficient of friction. Hard chrome is used extensively in the aerospace industry on fasteners, hydralic systems, landing gears, control surface actuators, etc. It is also used widely in the oil industry to prevent wear which could result in leaks, blowouts, etc.

The process consists of a bath containing electrically charged chrome ions which are repelled by lead anodes and attached by the cathodicly charged item being chrome plated. The chrome bath consists of $3\frac{5}{2}$ oz. of chrome per gallon of H_2O , .35 oz. of sulfuric Acid per gallon of H_2O as a catalyst.

The hazardous waste generated is minimal for the size of the operation. Small quantities are generated from these areas:

- a limited amount of "drag out" into rinse tanks- some dripping from parts as they are removed from the plating tanks and placed in the rinse tanks
- chrome residue from air scrubber water
- chrome stripping chemicals
- rust preventative oil

These residues are retained and put through a Chrome Precipitation and Evaporation System which renders only a small quantity of filter cake which is then packaged per applicable regulations, stored for a period less than 90 days and lawfully transported by a registered hazardous waste hauler, to a Class I landfill for disposal.

SECTION 3. EMERGENCY COORDINATOR AND RESPONSE PROCEDURES

The following is a listing of personnel designated as having authority to assume supervisory responsibility in the event of a spill or other contingency. Phone numbers are listed so that they may be contacted at any time their services are required for this function.

Details of the responsibilities to be assumed by the Emergency Coordinator are presented below; the procedures to be implemented for response are outlined in Section 3.6 (incident response - release of hazardous waste, fire or explosions).

Primary Emergency	Coordinator:	Mike Reed	FX-6: F	Personal Privacy
Second Alternate:				
	FX-6: Pe	Dale Reed ersonal Privacy)
Third Alternate:		HOME ADDRESS	()
Facility Owner:		Philip W. Ree HOME ADDRESS	ed FX-6: I	Personal Privacy

RESPONSIBILITIES OF EMERGENCY COORDINATOR

The Emergency Coordinator (EC) is responsible for coordinating all emergency response measures and as such has the authority to commit the resources needed to carry out this Contingency Plan.

Personnel qualified to act as an EC are on the premises or on call and capable of quick arrival at all times. The EC is thoroughly familiar with:

- All aspects of this contingency plan;
- All operations and activities at the facility;
- Location and characteristics of wastes handled;
- Location of all records within the facility, and;
- Facility layout.

In the event that the Primary Emergency Coordinator is not present at the plant when an incident occurs requiring action, the next designated person on the list who is present at the facility will assume responsibility for immediate response activities. In any event, one or more of the Emergency Coordinators must be present at the facility or on call during any part of the day. The Emergency Response Coordinator acting at the facility will have responsibility for summoning personnel and outside contractors, which may be necessary to respond to the incident, will contact emergency response personnel who may be needed to assist with the response, and will direct response activities, including designation of methods for clean-up and disposal of material from the

EMERGENCY RESPONSE PROCEDURES

The emergency response procedure can be broken down into the following steps, which are briefly described.

3.1 Recognition of Potential or Actual Emergency Situation

Site personnel are trained to recognize potential incidents which may result in an emergency. This training is included as part of the requirements of 40 CFR 265.16. If there is any reasonable chance that a particular situation or incident represents an emergency or imminent hazard to public health or the environment, site employees shall report such a situation or incident to their immediate supervisor, who in turn will contact the Primary Emergency Coordinator, who will make the determination as to whether an emergency hazard exists. Incidents which must be reported include spills, materials release, fire and/or explosions. Outside agencies will be notified at this time by the Emergency Coordinator for incidents requiring immediate response (fire, explosion, etc.).

3.2 Notification of Emergency Coordinator

Upon recognition of any incident or situation which could potentially lead to an emergency, site employees or management shall notify the Emergency Coordinator by phone or pager without delay after leaving the immediate area. The Emergency Coordinator shall notify the appropriate local, state and federal agencies (see Section 4.1 - Local Authorities Providing Assistance).

3.3 Evacuation Procedures

In the event of an emergency which would require total evacuation of the Facility, notification will be made through the horn system. The routes of evacuation to be taken are posted through-out the facility.

Once evacuated, personnel will assemble outside the front door to the facility, (conditions permitting -wind direction, other risks, etc.). A designated employee will conduct a head count at the assembly area and report results to the Emergency Coordinator as soon as possible. Personnel not able to report to an assembly area will contact the Emergency Coordinator individually, as soon as possible.

3.4 Hazard Determination

This key step shall be the responsibility of the Emergency Coordinator. The Emergency Coordinator will obtain the following information to permit a hazard evaluation.

- A. Type of incident (materials release, spill, fire, flood, explosion, etc.)
- B. Location of incident.
- C. Injuries and/or fatalities involved.
- D. Type, quantity and nature of material involved (this data is available from review of site records, hazardous manifests, Site Operations Plan, etc.)

This information should provide sufficient data for the Emergency Coordinator to evaluate the situation and to determine whether an imminent hazard or emergency exists. If necessary, a visual inspection of the situation shall be carried out from an upwind location at a prudent distance.

3.5 Implementation of the Contingency Plan

Once the Emergency Coordinator has determined that an emergency situation exists, he shall immediately implement the Contingency Plan. The actual steps to be taken will depend on the nature of the emergency; i.e., fire, explosion, materials release or spill. Regardless of the nature of the emergency, the following shall be the initial steps the Emergency Coordinator shall take after the hazard assessment.

- 1. Notify the facility personnel, then the City of Santa Fe Springs Fire Department of any emergency regardless of whether outside assistance is required. The Fire Department is the local area control point of emergency response. Other agencies are listed in Section 4.1 (Local Authorities Providing Assistance).
- 2. If it is determined the emergency could threaten human health or the environment outside the facility, the Emergency Coordinator must notify, in order, the appropriate local, state and federal agencies listed in Section 4.2. (Agencies to be Notified in a Spill Event), with a report as follows: Use Form 9.2
 - A. Name and phone number of person reporting.
 - B. Name and address of facility.

C. Time and type of incident.

D. Name and quantity of material involved.

E. The extent of injuries.

F. Possible hazards to human health or the environment outside the facility.

Completion of the Emergency Event Reporting Form will ensure that all the appropriate information is reported. This form is shown as 9.2.

3.6 Incident Response

The following sections deal with specific actions to be taken in the event of materials spills or releases, fires or explosions and floods.

3.6.1 Release of Hazardous Waste

In the event of a release of hazardous wastes or hazardous waste constituents, the steps outlined above shall be taken prior to abatement activity. To reiterate briefly, these consist of:

- Recognition of emergency situation;
- Notification of Emergency Coordinator;
- Hazard evaluation:

Most releases or spills of hazardous waste at this site can be contained or the condition corrected through the use of the front-end loader, pumps, or vacuum trucks, depending on the quantity and physical state of the spilled or released material. The magnitude of response will depend on the quantity and type of material spilled.

The first step, after items 3.1 (Emergency Response Procedures), 3.2 (Notification of Emergency Coordinator), and 3.3 (Evacuation Procedure) discussed above shall be to isolate the affected area to prevent unnecessary exposure and contamination of personnel or equipment. Isolation measures consist of barricading off solid waste spills. Liquid waste spills shall be contained by isolation of the affected containment area by dikes of absorbent material. The size of the isolated area will depend upon the quantity of released material but will be confined to the smallest possible The next step shall be to remove the spilled or released material. Equipment available on-site shall be If this is insufficient, additional equipment shall be summoned as required. The spilled material as well as adjoining and underlying soil shall be transported offsite for disposal. The same procedure, but on a larger scale, shall be used should the spill be larger. If necessary, additional equipment is available from California Chemical Disposal Company, who are on call 24 hours a day at (213)-834-8077 or (800)828-4455.

In the event of small liquid waste spills, it is possible that the material will have been absorbed into the soil faster than the equipment or absorbent can be brought onto the scene. In that case, the contaminated soil and the dirt adjoining it shall be removed. The underlying or neighboring soil shall be tested for residual contamination and removed if necessary.

Larger liquid waste spills shall be diked off. Once the spill has been contained, a vacuum truck shall be obtained. The vacuum truck(s) shall be used to draw off the contained spill for transport offsite. Once all of the liquid has been removed, the contaminated soil shall be loaded onto plastic lined end-dump trucks using front-end loaders. This hazardous waste shall then be disposed offsite. As with the small liquid spills, the underlying soil shall be sampled and removed in the event of residual contamination.

In the event of an offsite release, the responsible management person will contact all appropriate federal, state and local authorities with the following information as conditions dictate (see Section 4.2 - Agencies to be Notified in a Spill Event). Use Form 10.2

- 1. Name and telephone number of reporter.
- 2. Name and address of facility.
- 3. Time and type of incident.
- 4. Name and quantity of material involved.
- 5. The extent of injuries.
- 6. The possible hazards to human health and the environment.

Use of the Emergency Event Reporting Form will facilitate the communication of this information. The appropriate agencies are listed in Section 4.2 (Agencies to be Notified in a Spill Event).

3.6.2 Fire

In case of fire:

- A. Notify site management and the Santa Fe Springs Fire Department immediately. Notify site personnel (horn sounding system).
- B. Site management will determine the type of fire, method of fire fighting and notification sequence. In any case, one operator will be dispatched to man the driveway entrances until that man is relieved by a management person or a guard service arrives.
- C. In case of chemical fires, it is very important that water not be applied immediately but the situation be fully evaluated prior to application of water. In emergency situations, water may not

always be the best control measure. Extinguish by means of a fire extinguisher or, whenever determined appropriate, a fire hose. If the nature of the product on fire is unknown, evacuate the immediate area to an upwind location and wait for management instructions.

D. Site management will be assessing the hazard potential and will direct personnel accordingly. All fires should be approached with protective equipment appropriate to known hazards. If hazards cannot be readily assessed, protective equipment appropriate to the worst known hazard must be worn.

Every effort will be made to prevent spread of a fire or reduce its magnitude in the least amount of time, consistent with safety of the employees and environment.

3.6.3 Fire Fighting Stations

- A. Fire extinguisher upon notification of site management personnel of the situation, the person first sighting the fire should secure the closest extinguisher for extinguishing and/or containment of the fire. Additional extinguisher help may be needed.
- B. Fire hydrant closest to the fire additional personnel shall be directed to the nearest accessible fire hydrant station. If, after management fire assessment, it is determined water would be of aid to extinguishing the fire, the water will be turned on. If not used for fighting, the water could be used to cool other chemical tanks/containers in close proximity to the actual fire as directed by site management.
- C. Maintenance mechanic one man will be notified by the Emergency Coordinator to stand by with tools available.
- D. Traffic Control one person will be directed by the Emergency Coordinator to close the driveway entrances to all incoming traffic, except emergency vehicles. This person will also be responsible for keeping the access road to the facility clear and unobstructed for emergency response teams. This person will also be responsible to hold all vehicles at the building until an evacuation route for onsite vehicles has been determined.
- E. Employee Staging area The parking lot outside the front door of the building - all personnel will report to this area when possible and await management instructions.

3.6.4 Fire (uncontrollable)

- A. Call for help. Alert personnel (horn system). Notify a management person and notify the fire department.
- B. Evacuate the area. Whenever possible, evacuate the hazard area by moving upwind from the fire. Follow evacuation procedure; if it be comes necessary to evacuate the site, report to the parking lot at the corner of Los Nietos and Dice Rd.
- C. Follow management instructions. Report to waiting area or assembly area for further direction.

3.6.5 Explosions

- A. Alert site personnel (horn system) as to the degree and location of the explosion. Instruct personnel to stay clear of the area involved.
- B. Notify a management person. The Emergency Coordinator is to notify the fire department.
- C. If a fire develops, follow emergency procedures for fire control or evacuation. The Emergency Coordinator will give the order to evacuate if necessary.
- D. Equipment which may have been directly or indirectly affected by the explosion shall be removed from service once management personnel have determined the area to be safe for entry. The affected equipment shall be inspected and certified fit prior to return to service.
- E. Follow instructions as directed by the Emergency Coordinator on the scene.
- F. Once the emergency condition is no longer imminent and site evacuation deemed not to be necessary, site personnel are to meet at the office for a head count.

3.7 Prevention of Recurrence

An important part of the Contingency Plan is the prevention of recurrence or spread of fire, explosion or materials release. Specific steps will depend on the nature of the emergency.

If necessary, operations at the site will be suspended so that no additional hazardous waste materials are brought onsite. If operations are temporarily halted in response to an emergency, the site will be inspected for

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appropriate leaks, smoldering fire, etc., prior to restarting affected operations.

In the event of a fire, release or explosion, steps will be taken to prevent its spread by isolating the surroundings, shutting down processes and isolating adjacent areas as required and as conditions allow. The immediate recurrence of fires and explosions will be controlled by cooling, isolation, fire fighting foam, etc., until it can be determined that the conditions (heat, source of ignition, materials, etc.) have been reduced and/or eliminated.

The following items shall be checked after any major act of God (earthquake, flood, storm, etc.).

- A. Inspect all tankage or containment vessels for signs of leakage or damage.
- B. Inspect all operational units for proper operation mode and manually check to ensure all automatic and alarmed features on unit are working.
- C. Inspect all piping, valves and fixed pumping units for damage.
- D. Inspect electrical boards, overhead electrical lines and poles for damage.
- E. Check waste storage area for signs of leakage or damage to storage drums.
- F. Check all buildings and fencing for damage.
- G. Conduct a general survey of the site looking for signs of land movement, etc.

Take any necessary corrective measure, however temporary, to rectify potential or real problems. Contact the management person on duty or on call to relate the inspection results. Use Form 9-3-1 (Inspection Form) and Form 9.3.2 (Log Inspection Results Form).

3.8 Attainment of Control

The Emergency Coordinator shall determine when the emergency situation has been controlled. be deemed attained when the risk to environment, the health of employees and to the public arising from the incident will have been minimized. As a minimum, this shall entail the extinction of all fires and the control of any spills or leaks. Also, any emergency equipment used must be replaced and ready for reuse, and any released material must be contained or disposed. Inspection of the site will be conducted prior to return to normal operating status, at which time notification of appropriate local, state and federal authorities will be made. Within 15 days of implementing the Contingency Plan, a report of the incident must be filed with the appropriate agencies, including the U.S. Environmental Protection Agency, California Environmental Protection

Agency, Dept. of Toxic Substances Control and Regional Water Quality Control Board (see Section 4.2 - Agencies to be Notified in a Spill Event).

- Name, address and telephone number of operator or owner.
- 2. Name, address and telephone number of facility.

Date, time and type of incident.

- 4. Name and quantity of material involved.
- 5. Assessment of actual or potential hazards to human health or the environment.
- 6. Quantity and disposition of recovered materials.
- 7. Number and extent of injuries involved.

This report shall be presented by use of the Emergency Event Report, Form 9.2.

SECTION 4. OUTSIDE NOTIFICATION AND COORDINATION AGREEMENTS

ELECTRONIC CHROME & GRINDING CO. has agreements with local authorities to provide assistance in the event of an emergency. A list of primary local authorities which may provide assistance is presented below:

4.1 LOCAL AUTHORITIES PROVIDING EMERGENCY ASSISTANCE TO ELECTRONIC CHROME & GRINDING CO.

* Fire Response:	elephon	e Number:
City of Santa Fe Springs Fire Department 11300 Greenstone Avenue Santa Fe Springs, CA 90670		9 1 1
* Paramedics:	(310)	944-9713
		9 1 1
* Police Response:	•	
Norwalk Sheriff Station 12335 Civic Center Drive Norwalk, CA 90650	(310)	9 1 1 863-8711
* Hospitals and Clinics:		
Slauson-Sorenson Medical Clinic 11823 E. Slauson Ave, Suite 40 Santa Fe Springs, CA 90670	(310)	696-1161
Presbyterian Inter-Community Hospital 12401 E. Washington Blvd. Whittier, CA 90606	(310)	698-0811
* County of Los Angeles Fire Department Fire Prevention, Prepardness and Conservation Bureau Hazardous Materials Control Program 2615 South Grand Ave., Los Angeles, CA 90007-2668	(213)	744-5316
 * California Chemical Disposal 1815 East O Street Wilmington, CA 90744 		834-8077 828-4455

4.2 FEDERAL AND STATE AGENCIES TO BE NOTIFIED IN A SPILL EVENT

Agency:	Telephone Number:
California Environmental Protection Age Dept. of Toxic Substances Control (Reg. 1405 N. San Fernando Blvd. Burbank, CA 91504	ency(818) 567-3000 ion 3)
County of Los Angeles Fire Department Fire Prevention, Preparedness and Conservation Bureau Hazardous Materials Control Program 2615 South Grand Aveue Los Angeles, CA 90007-2668	(213) 744-5316
US EPA, Toxic Spills Division T-3-3 215 Fremont Street San Francisco, CA 94105	(415) 974-8131
Regional Water Quality Control Board (4) 101 Centre Plaza Drive Monterey Park, CA 91754-2156	4) (213) 266-7500
EMERGENCY RESPONSE	9 1 1
OFFICE OF EMERGENCY SERVICES	(800) 852-7550 (916) 427-4341
NATIONAL RESPONSE CENTER	(800) 424-8802
Department of Transport	(202) 426-1830
California Chemical Disposal 1815 East O Street Wilmington, CA 90744	(213) 834-8077 (800) 828-4455

Each of the above local authorities have a copy of the Contingency Plan presented and has been familiarized with:

- 1. The layout of the facility; as per drawing attached
- Properties of hazardous waste handled at the facility and associated hazards;
- Places where facility personnel would normally be working;
- 4. Entrances to and roads inside the facility;
- 5. Possible evacuation routes; and
- The types of injuries or illness which could result from fires, explosions or releases.

4.3 EXTERNAL REPORTING

Within 15 days after an incident involving implementation of this contingency plan, Electronic Chrome & Grinding Co. will submit a written report on the incident to the County of Los Angeles Hazardous Materials Control Program and the California Environmental Protection Agency, Dept. of Toxic Substances Control. The report will include:

- Name, address and telephone number of the owner or operator;
- 2. Name, address and telephone number of the facility;
- Date, time and type of incident (eg. fire, explosion);
- Name and quantity of material(s) involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- Estimated quantity and disposition of recovered material that resulted from the incident. Use Form 9.2.

SECTION 5. SPILL RESPONSE PROCEDURE

Because of the great degree of containment and the generally conventional nature of material handled at this facility, it is not anticipated that a spill response of any great magnitude or complexity will ever be required.

However, as protection against such an occurrence, California Chemical Disposal Company has been contracted with us to provide back-up spill response in the event it is needed. This company is on call 24 hours per day, 365 days per year, at 213-834-8077 or at 800-828-4455. They have a wide range of equipment for use in response activities and trained personnel. The company name and phone number are shown above and on Section 4.2 (Agencies to be Notified in a Spill Event).

In the event of a spill, the following procedure is to be followed by all plant personnel:

- A. The person detecting the spill should immediately stop the source of the spill and prevent flow to the outside if this can be done safely. Stopping the spill may involve turning off pumps, closing valves, righting a barrel or other appropriate action. It should be noted that any spill greater than a 55 gallon drum must be turned over to California Chemical Disposal Company, who are on call 24 hours a day at (213) 834-8077, or 1-800-828-4455.
- B. The Emergency Coordinator should be summoned to the scene and informed of the source and nature of the spill and of mitigation activities which have been carried out up to that time.
- C. The Emergency Coordinator will then assume responsibility for directing cleanup activities. He will summon to the scene that manpower and equipment which is needed to respond to the incident and will direct their activities for the duration of the response.
- D. He will contact, or have a designated person contact any support groups whose assistance is needed in the response effort, such as the police or fire departments. Notification of regulatory agencies, should it be required, will be handled in accordance with the provisions of Section 3 (Emergency Coordinators and Response Procedures) and Section 4 (Outside Notification and Coordination Agreements).
- E. Once the spill has been isolated from possibly leaving the site and the source of the spill has been eliminated, efforts will be directed toward containment of the spilled material within the

smallest area possible. This should help minimize the amount of area which must be cleaned up and decontaminated, making the response effort as efficient as possible.

F. After the bulk of the spilled material has been removed, final cleanup of the area will be conducted. This will include decontamination of the area and equipment used for the clean-up, in a manner which will return the affected area to its previous level of usefulness and safety.

Whenever possible, cleanup will be conducted in a manner which will permit reuse of the material, either in processing operations directly or for some related purpose. Where this is not possible, disposal of material resulting from the cleanup will be in accordance with all applicable regulation.

To present the contingency plan in a concise manner, spill response procedures/hazards for the most likely types of chemicals utilized on site have been summarized as follows:

- .2 Aqueous wastes. Generally non-flammable wastes. Consists of dilute solutions of chromic acid.
- .3 Flammable liquids. Primarily single drum quantities of 1,1,1-Trichloroethane, Mineral Spirits 75, and Velocite Oil # 10.
- .4 Acids. Primarily hydrochloric.
- .5 Caustics. Strong bases such as hydroxides.
- .6 Oxidizers. Chromic Trioxide
- 5.2 AQUEOUS WASTE (A-132) Plating Tanks

POTENTIAL HAZARDS

Fire:

Some material in this group cannot catch fire. Others can catch fire but do not ignite readily. Some material in this group can ignite combustibles.

Explosion:

Heated container may rupture violently due to overpressurization and produce flying missiles.

Health:

Vapor may be irritating, if breathed. Contact with material may cause severe burns to skin and eyes. Fuming liquids may release vapors which are highly toxic and/or destructive to eyes and mucous membranes. Contaminated water or material runoff may pollute water supply. Fire may produce toxic fumes.

Evacuation (if necessary): 1,000 Feet (400 Paces) Minimum in all directions. Also throughout plus half this distance on all sides of any area endangered by vapor cloud.

IMMEDIATE ACTION INFORMATION

General:

No unnecessary personnel. Keep upwind. Identify product and isolate hazard area. Wear firefighters full protective clothing, including eye protection, chemical resistant gloves, and self-contained breathing apparatus. Special clothing may be required. Refer to MSDS for specific information.

Fire: (Non-flammable)

Spills:

Stop leak if without risk. If possible use absorbent rags or towels to contain spill, but proceed with extreme caution. If runoff cannot be contained, notify downstream health, water, and sanitation district. If qualified, obtain pH reading; do not attempt to neutralize unless trained. Dilute spill with large amounts of water from low pressure streams. Watch for reaction and avoid vapor clouds. Dike ahead for later disposal. Your contaminated clothing and absorbent material should be properly disposed of.

First Aid:

Remove to fresh air. Call physician. In case of contact with material or water solution, immediately flush skin or eyes with running water for at least 15 minutes. Remove contaminated clothing and shoes. Keep patient at rest; treat for shock. Effects of contact or inhalation may be delayed. Rescue and ambulance personnel should wear rubber gloves.

NEED Personal Protection:

Avoid contact with the waste and stand upwind. Wear rubber gloves, safety goggles, a half-face respirator with organic vapor cartridges and other equipment to prevent contact with the body. For skin contact: remove all contaminated clothing and flood skin with water. For eyes: hold eyes open and flush with water. If symptoms persist or develop, seek medical attention.

5.3.1 Flammable Liquids (A-95) - Mineral Spirits #75 and Petroleum Distillate (Mobil Velocite Oil #10)

POTENTIAL HAZARDS

Fire:

May be ignited by heat, sparks, or open flame. Ignition of vapor may occur at some distance from leaking container. Vapor entering sewer or other closed spaces may create explosion hazard.

Explosion:

Heated containers may rupture violently and produce flying missiles.

Health:

Fires may produce irritating gases. Vapors may cause dizziness, suffocation, or narcosis (unconsciousness), if breathed, particularly in confined area. Vapors are likely to be invisible.

Evacuation (if necessary):

FIRE: 1,500 Feet (600 Paces) Minimum in all directions. NO FIRE: 1,000 Feet (400 Paces) Minimum in all directions. Also, throughout plus half this distance on all sides of any area endangered by vapors.

IMMEDIATE ACTION INFORMATION

General:

No unnecessary personnel. Keep upwind. Identify product and isolate hazard area. Self-contained breathing apparatus should be available. Wear full protective clothing.

Fire:

NEED MSDS

On small fire, use dry chemical or carbon dioxide. On large fire, use standard firefighting agents. Refer to MSDS for water solubility if firefighting foam is to be used. Move exposed containers from fire area, if without risk. Cool containers with water. Continue cooling after fire has been extinguished. The fire may appear extinguished but flash-back can occur along vapor trail and re-ignite it. Water spray may be useful in knocking down vapors.

Spills:

Within hazard area: Eliminate all sources of ignition. No flares, no smoking, no open flames. Stop leak if without risk. Use water spray to reduce vapors. Dike large spills for later disposal. Use noncombustible absorbent material to collect small spills. Prevent integration of material with oxidizing substances. Vapors from spilled or leaking liquids will probably be heavier than air and may travel some distance from source. Use combustible gas detectors to determine fringe areas. Contaminated clothing and absorbent material should be sealed in a vapor-tight container for eventual disposal as a hazardous waste.

Personal Protection:

Avoid contact with the material and stand upwind. Wear rubber gloves, safety goggles, a half-face respirator with organic vapor cartridges, and other equipment to prevent contact with the body. For skin contact: Remove all contaminated clothing and flood skin with water. For eyes: hold eyes open and flush with water.

First Aid:

Remove to fresh air. Use standard first aid procedures.

5.3.2 Flammable Liquid (A-82) - 1,1,1-Trichlorethane

Fire:

Some materials in this group cannot catch fire, others can catch fire, but do not ignite readily.

Explosion:

Heated container may rupture and produce flying missiles.

Health:

Gas very irritating, if breathed. May cause extreme burning of the eyes resulting in a copius flow of tears. May also cause coughing, difficult breathing and nausea. If exposure is brief, effects last only a few minutes. Effects may be serious if exposed to product in an enclosed unventilated area, or for extended periods of time. Fire may produce irritating or poisonous gases. Runoff from fire control may cause pollution.

Evacuation (if necessary): 500 Feet (200 Paces) Minimum in all directions. Also, throughout plu half this distance on all sides of any area endangered by smoke and/or vapor cloud.

IMMEDIATE ACTION INFORMATION

General:

No unnecessary personnel. Self-contained breathing apparatus should be available. Ventilate enclosed areas before entering. Decontaminate all personnel and equipment thoroughly following exposure.

Fire:

On small fires, use dry chemical or carbon dioxide. On large fires, use standard firefighting agents. Keep containers cool. Move containers from hazard if without risk.

Spill:

Stop leak if without risk. Avoid contact with spilled material. Dike large spills for later disposal. If material escapes, notify downstream authorities.

First Aid:

Remove to fresh air. Remove contaminated clothing and shoes. In case of contact with material, immediately flush skin or eyes with running water for at least 15 minutes. Effects should disappear after individual has been exposed to fresh air for 5 - 10 minutes. If breathing is difficult, give oxygen.

5.4.1 Acids (A-133) - Hydrochloric Acid

POTENTIAL HAZARDS

Fire:

NEED Some material in this group cannot catch fire, others can catch fire but do not ignite readily.

Explosion:

Heated container may rupture violently due to overpressurization and produce flying missiles.

Health:

Vapor, mist, or dust is poisonous if breathed. Contact with material may cause severe burns to skin and eyes. Contaminated water or material runoff may pollute water supply. Runoff to sewer may create poison hazard. Fume and smoke cloud may be extremely toxic.

Evacuation (if necessary): 1,000 Feet (400 Paces) Minimum in all directions. Also, throughout plus half distance on all sides of any area endangered by smoke and/or vapor cloud.

IMMEDIATE ACTION INFORMATION

General:

No unnecessary personnel. Keep upwind. Identify product and isolate hazard area. Wear self-contained breathing appartatus and full protective clothing and chemical resistant gloves. Special clothing may be required. Refer to MSDS for specific information.

Fire:

On small fires, use dry chemical or carbon dioxide. On large fires, use standard firefighting agents. Move exposed containers from fire area, if without risk. Cool containers with water. If products of combustion or vapor clouds endanger inhabited area, evacuate all regions threatened (see above). Do not get water in container.

Spills:

Stop leak if without risk. If runoff cannot be contained, notify downstream health, water, and sanitation districts. Do not get water in containers; violent reaction may occur. If qualified, obtain pH reading; do not attempt to neutralize unless trained. Cover spill with foam or dilute with large amount of water from low pressure streams; watch for reaction and avoid vapor clouds. Dike ahead for later disposal. Decontaminate equipment and personnel following exposure.

First Aid:

Remove to fresh air. Call a physician and identify product. In case of contact with material or water

solution, immediately flush skin or eyes with running water for at least 15 minutes. Remove contaminated clothing and shoes immediately. Keep patient at rest, treat for shock. Effects of contact or inhalation may be delayed. Rescue and ambulance personnel should wear rubber gloves.

5.4.2 Acid/Oxidizer (A-112) - Chromium Trioxide (solid 100 lb drums)

POTENTIAL HAZARDS

Fire:

NEED May cause fire and react violently on contact with combustibles. Reaction with fuels may be violent.

Explosion:

Mixtures with fuels may explode. Very high oxidizers may react vigorously with any combustible material. Container may explode in heat of fire.

Health:

Vapor, mist, or dust is poisonous, can be fatal if breathed in high concentrations. Contact with material may cause severe burns to skin and eyes. Contaminated water or material runoff may pollute water supply. Runoff to sewer may create poison and explosion hazard. Smoke cloud may also be toxic.

Evacuation (if necessary): 1,500 Feet (600 Paces) Minimum in all directions. Also, throughout plus half distance on all sides of any area endangered by smoke and/or vapor cloud.

IMMEDIATE ACTION INFORMATION

General:

No unnecessary personnel. Keep upwind and upgrade. Identify product and isolate hazard area. Wear self-contained breathing appartatus and full protective clothing. Refer to MSDS for specific information.

Fire:

On small fires, use dry chemical, soda ash, or carbon dioxide. On large fires, use water spray or fog. Move exposed containers from fire area, if without risk. Cool containers with water from maximum distance and from behind barrier. Use water pray to protect surrounding area. Flooding amount of water may be required before extinguishment can be accomplished, but do not put stream on any pool of liquid material; watch for reaction. If material reacts vigorously, discontinue application.

Spills:

Stop leak if without risk. Keep spilled material away from combustibles. Collect small solid spills into

clean, dry metal container and keep tightly covered. Use non-combustible absorbent material (sand, etc.) to collect small spills. Dilute liquid spill with large amounts of water using spray or fog nozzles unless reactive. Dike for later disposal. If runoff cannot be contained, notify downstream health, water, and sanitation districts. Do not get water inside containers. Decontaminate equipment and personnel following exposure.

First Aid:

Remove to fresh air. Call a physician and identify product. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Remove contaminated clothing and shoes immediately. In case of contact with material or water solution, immediately flush skin or eyes with running water for at least 15 minutes. Keep patient at rest and treat for shock. Effects of contact or inhalation may be delayed. Rescue and ambulance personnel should wear rubber gloves.

5.5 Caustics NEED MSDS FOR MAGNESIUM HYDROXIDE

Spills:

If possible, use absorbent, rags or towels to contain the spill but proceed with extreme caution. Your contaminated clothing and absorbent material should be properly disposed. Wash spill area with soap and water.

Fires: Non-flammable

Personal Protection:

Avoid contact with the waste and stand upwind. Wear rubber gloves, safety goggles, a half-face respirator with organic vapor cartridges, and other equipment to prevent contact with the body. For skin contact: remove all contaminated clothing and flood skin with water. Rinse affected areas with dilute vinegar solution. For eyes: hold eyes open and flush with water. If symptoms persist or develop, seek medical attention.

Hazards:

Causes severe burns to eyes skin and mucous membranes.

- 5.6 Oxidizer/Acid (A-112) Chromium Trioxide (solid 100 lb drums)
 - * See 5.4.2 Acid/Oxidizer

SECTION 6. LIST OF EMERGENCY EQUIPMENT AND SPECIFICATIONS

6.1 PERSONNEL SAFETY EQUIPMENT (The following equipment is located in the store room)

TABLE 6.1

Equipment Specifications

Acid Gas/01	rganio	vapor
Respirator	plus	replacement
cartridges		-

Protects against 100 ppm vapors by volume or 0.1% 10 ppm chlorine, 50 ppm sulfur dioxide.

Disposable Vitron Suits

Resistant to organic and inorganic acids, caustics, grease and oil PCB's, chlorinated solvents.

PVC Coated Gloves

Resistant to acids or caustics, grease and oil

PVC/Nitrile Knee Boots

Resistant to a broad range of chemicals including acids, oil and grease

Chemical Splash/Impact goggles

Wrap around /snug face fit for protection from hazardous waste contact with eyes during cleanup

Portable Eye Wash

Portable, quick mechanism holds 2.5.1 of water or 4 to 6 minutes of spray

Chemical Absorption Mops

Absorbs acids, caustics, solvents and oils

Absorbent

Microfibers or polypropylene can absorb 9 times its weight in acids, caustics, solvents and oils

Sodium Carbonate (soda ash)

Can neutralize acid spills

Portable Dry Chemical Fire Extinguishers Class A,B,C fires

18 pounds; 20 a:80 B:C discharge 15-25 ft., discharge time 22 seconds

6.2 Fire Extinguishers

Fire extinguishers are to be inspected monthly by the foreman or other designated site personnel. Inadequate pressure reading or damaged extinguishers are to be noted. The noted extinguishers are to be removed and replaced. All fire extinguishers are inspected annually by a qualified fire extinguisher service person. Inspection check list will be maintained on file. Use Form 10.4 - Emergency Equipment Inspection Check List.

6.3 Safety Shower and Eyewashes

- A. To ensure all safety shower and eyewash stations are operating correctly and damaged or defective parts are replaced to ensure proper operation during an emergency.
- B. To flush the shower and eyewash station to rid rust and dirt buildup.

6.4 First Aid Kit

The first aid kit is inspected monthly according to company policy. A list of required materials is included at each first aid station and as material is used and the supply depleted, replacements are obtained from the purchasing department at the office.

6.5 Maintenance of Emergency Equipment After Use

All used portable emergency equipment will be cleaned and recharged. Prior to affected system(s) start up, the Emergency Coordinator will ensure that replacement emergency equipment is in place. Site or process operations will not be resumed until all emergency equipment is in place and verified by the inspection checklist. Use Form 10.4. (Emergency Equipment Inspection Check List).

6.6 Safety Equipment Locations

Fire extinguisher locations - see facility layout map 9.1. Safety showers and eyewash stations - see facility layout map 9.1. First Aid Box - see facility layout map 9.1. Personal protection equipment is available to site personnel on the site in sufficient quantity to serve the needs of all employees, with stock maintained in adequate supply to ensure that all equipment can be exchanged if needed.

SECTION 7. POST RESPONSE ACTIVITIES

After the emergency situation is contained/controlled, the facility supervisor or his designee will immediately provide for treating, storing or disposing of recovered waste, contaminated soil or surface water or any other material that results from a release, fire or explosion at the facility. (For example, contaminated absorbent pads or soil will be drummed and stored prior to appropriate disposal).

The facility supervisor will ensure that no waste that may be incompatible with the released material is treated, stored or disposed of until clean-up procedures are completed.

The facility supervisor will ensure that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

The facility supervisor or his designee will notify the Department of Health Services and appropriate state and local authorities that the facility is in compliance with the above conditions before operations are resumed in the affected area(s) of the facility.

SECTION 8. PROVISION FOR AMENDMENTS

This Contingency Plan shall be reviewed annually or appropriately amended as a result of the following situations:

- 1. The facility operations change such that the potential for fires, explosions and/or releases of hazardous wastes is altered.
- The facility permit is revised.
- 3. Review after an emergency shows an alternative or improved method of control and/or prevention of the incident.
- The Contingency Plan fails or is deficient in an emergency.
- The list of Emergency Coordinators changes.
- The list of Emergency equipment changes.

The intention is to have a fully up-to-date and functional plan to deal with any emergency. The facility supervisor is responsible for amending the plan. Whenever the plan is substantially amended, copies of the amendments will be submitted to all outside agencies having a copy of the plan and written confirmation of receipt of the amendments will be required.

USE THIS FORM TO CONTACT LOCAL AUTHORITIES PROVIDING EMERGENCY ASSISTANCE.

9.1 EMERGENCY EVENT REPORTING FORM

ELECTRONIC CHROME & GRINDING CO. EPA ID #: CAD 008 391 427 9128-32 Dice Rd.
Santa Fe Springs, CA 90670

· ·		phone number of person i			· ·
Name and	d addre	ess of facility:			
Time/Dat	te of i	ncident:			<u></u>
Type of	incide	ent:			
Materia:		ent: nvolved and quantity:			
Fytont /			<u> </u>		
The rela	ease ma	V or may not affect hus	man health or	r the	
If YES,	descri	be:			
		cion taken to contain re			
Estimate incident	ed quar	ntity and disposal of re	ecovered mate	erial	from
Hazardo	ıs Wast	e Manifest No		(if ap	plicable)
Local A	ithorit	cies providing emergency	y assistance	(Sect	ion 4.1)
1	Fire De	partment	911	(310)	944-9713
	Paramed	-		,	911
		Department	911	(310)	863-8711
(Office	of Emergency Services		(800)	852-7550
				(916)	427-4341
1	Hospita	als and Medical Clinics	•	, ,	
	Slaus	son-Sorenson Medical Cl	inic	(310)	696-1161
	Presi	yterian Inter-Community	y Hospital	(310)	698-0811
\$	State	California Environmenta Dept. of Toxic Substance	al Protection ce Control Pr	rogram	
	•	Region 3		(818)	567-3000
(County	County of Los Angeles 1 Fire Prevention, Prepar	redness	ent	
		and Conservation Bureau	1	(213)	744-5316
(Califor	nia Chemical Disposal		(213)	834-8077
				(800)	828-4455

USE THIS FORM "ONLY IF" THE EMERGENCY COULD THREATEN HUMAN HEALTH OR THE ENVIRONMENT OUTSIDE THE FACILITY

ELECTRONIC CHROME & GRINDING CO. EPA ID #: CAD 008 391 427

9.2 EMERGENCY EVENT REPORTING FORM

9128-32 Dice Rd. Santa Fe Springs, CA 90670	CAD UU	0 331 427	
Name and telephone number of person reporting:			
Name and address of facility:			
Time/Date of incident:			
Type of incident: Material(s) involved and quantity:			
Extent of injuries:			
The release may or may not affect human health or environment:	r the		
If YES, describe:			
Corrective action taken to contain release:			
Estimated quantity and disposal of recove red matincident:	erial	from	
Hazardous Waste Manifest No	(if ap	plicable)	
0117 107NOTES BELOW (e Number:	
Burbank, CA 91504 REGION 3	(818)	567-3000	
 County of Los Angeles Fire Department Fire Preverses Preparedness and Conservation Bureau 	zentio:	n,	
Hazardous Materials Control Program COUNTY	(213)	744-5316	
- U.S. EPA (Toxic Spills Division)	(415)	974-8131	
- Regional Water Quality Control Board	(213)	266-7500	
- California Chemical Disposal		834-8077 828-4455	
EMERGENCY RESPONSE		9 1 1	
OFFICE OF EMERGENCY SERVICES		852-7550 427-4341	
NATIONAL RESPONSE CENTER	(800)	424-8802	

PREVENTION OF RECURRENCE - INSPECTION FORM 9.3.1

The following items shall be checked after any major Act of God (earthquakes, floods, storms, etc.) Tanks or containment vessels: All equipment, safety guards, alarms, etc.:_____ Pumping units, pipes, valves, etc.:_____ Gas leaks, valves, pipes, etc.: D. Electrical panels, electrical lines, poles, etc.:_____ E. Water leaks, valves, pipes, pure, etc.:_____ F. Waste storage area and containers: Buildings, fences:_____ н. General site survey (land movement, etc.):_____ Additional Comments (attach additional pages as required):____

20-25

ROLAND P. KELLY, P.E.

Consulting Civil Engineer 235 W. Magna Vista Avenue Arcadia, California 91007-6942

May 1, 1992

Electronic Chrome & Grinding Co., Inc. 9128-32 Dice Rd. Santa Fe Springs, CA 90670

Attention: Mike Reed

Vice President; General Manager

Subject:

Tank and Containment System Certifications

Gentlemen:

In support of subject certifications, the following information and data is submitted.

1. SITE INSPECTION

A site investigation was conducted on April 29, 1992. Tanks and containers used for the storage and treatment of industrial/hazardous wastewaters and wastes were inspected as well as associated containment systems.

2. OVERVIEW

Electronic Chrome & Grinding Co., Inc. provides chrome plating and grinding services to industrial and commerical clients. Industrial wastewaters are batch-treated on-site. Treatment consists of chemical mixing, sedimentation and sludge removal. Sludge is passed through a filter press. The filter cake is treated as a hazardous waste. Effluent from the filter press is returned to the industrial wastewater hold tank for further treatment. Decanted water from the settling tank is returned to the industrial water system. The on-site treatment system does not discharge any effluent into the sanitary sewer system. Industrial wastewaters are stored in tank located in the wastewater treatment facility area which is provided with a containment curb around the perimeter. The wastewater treatment area is approximately 12 feet by 40 feet. The waste water treatment facility was free of debris; there was no evidence of standing water; equipment was clean and appeared to be well-serviced. The waste water treatment facility was neat is well maintained as a mater of company policy.

ROLAND P. KELLY, P.E.

Consulting Civil Engineer

Electronic Chrome & Grinding Co., Inc. May 1, 1992 Page Three

no evidence of separation. The containment area has capacity to contain 150% of the contents of the largest tank. The containment appears to be well constructed, well maintained and of adequate capacity. There was no discoloration at concrete or evidence of surface deterioration such as exposure of aggregate.

5. CERTIFICATION

Based on observations made during the site investigation on April 29, 1992, it is hereby certified that the tanks described in preceeding sections have integrity within the context of Cal Code Regs, tit 22, sec 66264.191 and the containment system is suitably designed to achieve the requirements of Cal Code Regs, tit 22, see 66264.776. This certification is valid as of April 29, 1992.

Certified:

Roland P. Kelly

Ca RCE No. 8450 (Expires 12/31/92)

Ca REA No. 395 (Expires 6/30/92) May 1 1992

If you have any questions, please contact me at (818) 446-2264 or (213) 583-6897.

Sincerely,

Roland P. Kelly

Consulting Engineer

RPK/rf

achines 12/31/92

ROLAND P. KELLY, P.E.

Consulting Civil Engineer

Electronic Chrome & Grinding Co., Inc. May 1, 1992 Page Two

ASSESSMENT OF EXISTING TANK INTEGRITY

Industrial wastewaters from chrome plating and grinding are stored in a hold tank, which is a double wall 500 gallon capacity polyethylene flat bottom tank vented to the atmosphere. This tank is an industrial product designed for the purpose of holding the wastewater which is stored. The tank did not exhibit any evidence of corrosion or structural deformation. Under normal operational conditions the tank should not rupture, break or deform.

A chrome stripper tank is used in the batch treatment of wastewater. The tank is a steel-lined, open top tank 18 inches deep, 14 inches wide and 9 feet long. The liner appeared to be intact; no scratches or breaks in the lining were observed. The steel tank did not exhibit any evidence of corrosion or structure deterioration. Design standards were followed such that under normal operational conditions the tank should not rupture, fail or crack.

The clarifier is a two-stage unit; each open top unit has a capacity of 500 gallons. The clarifier unit is constructed of steel with a steel support system. Design standards were followed such that under normal operation and maintenance the clarifier unit should not rupture, fail or crack. The tank and steel components did not exhibit any evidence of corrosion, deterioration or structural deformation.

Drums (55 gallon capacity) and tanks (various capacities) containing chemicals used in the treatment process are industrial products designed and manufactured for the purpose for which each are employed. Drums and tanks were clean, did not exhibit evidence of spillage, deterioration or structural deformation.

Filter cake is collected in a rectangular lined steel box. A forklift carries the box to and deposits the filter cake into a roll-on container. The roll-on container is a lined, double wall steel container covered with a security lid. The unit is operated and maintained by Environmental Security Systems, Inc. The filter cake is stored in the roll-on container until picked up for proper disposal. The roll-on unit was structurally intact. There was no evidence of cracks, structural deterioration or deformation, the cover was secured shut.

4. ASSESSMENT OF CONTAINMENT SYSTEM

Containment is provided as required around the on-site wastewater treatment facility. The curb was 8 inches wide and 8 inches high. The curb is constructed of concrete. The concrete is intact; there are no surface cracks, hairline cracks or chips in the surface. The interface between the concrete floor and curb is tight and there is

ROLAND P. KELLY, P.E.

Consulting Civil Engineer

Electronic Chrome & Grinding Co., Inc. May 1, 1992 Page Two

3. ASSESSMENT OF EXISTING TANK INTEGRITY

Industrial wastewaters from chrome plating and grinding are stored in a hold tank, which is a double wall 500 gallon capacity polyethylene flat bottom tank vented to the atmosphere. This tank is an industrial product designed for the purpose of holding the wastewater which is stored. The tank did not exhibit any evidence of corrosion or structural deformation. Under normal operational conditions the tank should not rupture, break or deform.

A chrome stripper tank is used in the batch treatment of wastewater. The tank is a steel-lined, open top tank 18 inches deep, 14 inches wide and 9 feet long. The liner appeared to be intact; no scratches or breaks in the lining were observed. The steel tank did not exhibit any evidence of corrosion or structure deterioration. Design standards were followed such that under normal operational conditions the tank should not rupture, fail or crack.

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MONTHY EMERGENCY EQUIPMENT INSPECTION CHECK LIST - FORM 9.4

·	Check if OK	Recommendations
Fire Extinguishers		
Fire Hoses		
Safety showers & eyewash stations		
Acid gas/organic vapor respirator plus replace- ment cartridges		
Disposable vitron suits		
PVC coated gloves		
PVC/nitrite knee boots		
Chemical splash/impact goggles		
Portable eyewash		
Chemical absorption mops		
Absorbent		
Sodium carbonate (soda ash)		· · · · · · · · · · · · · · · · · · ·
Portable dry chemical fire extinguishers, Class A.B.C.		

PREVENTION OF RECURRENCE - LOG INSPECTION RESULTS FORM 9.3.2 DATE TYPE OF ACT OF GOD INSPECTOR'S NAME TANKS EQUIPMENT C PLUMBING ELECTRICAL E HAZ. WASTE BUILDINGS **EXTINGUISHERS** H **GENERAL**

24 11

CONTINGENCY PLAN MANUAL - DISTRIBUTION - FORM 9.5

Date Presented or Mailed:	To Whom:	Facility & Address
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Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

5. Employee Training and Records

Electronic Chrome & Grinding Company, Inc. AB1772, Conditional Authorization Tier

6. Wastewater Treatment Logs

Electronic Chrome & Grinding Company, Inc. Waste Water Treatment Logs

Date Treated	Amount Treated (gallons)		
	·		

7. Demonstration of Compliance with POTW Permit Conditions

Electronic Chrome & Grinding Company, Inc. utilizes a closed-loop waste water treatment system. There is no industrial waste water sewer discharge. Therefore, no permit was applied to the sanitation districts.

8. Document Regarding Environmental Conviction, Etc.

Within the last three years, Electronic Chrome & Grinding Company, Inc. has not been the subject of any convictions, judgements, settlements, or final orders resulting from an action by any local, state, or federal environmental, hazardous waste, or public health enforcement agency.

9. Hazardous Waste Manifest

rurm designed for use on eine (12-pi	1. Generator's US EPA ID No.	Manifest Daniel		Socramento, Califo
UNIFORM HAZARDOUS WASTE MANIFEST	A similar of the later	Manifest Document No.	2. Pagé 1	Information in the shaded of is not required by Federal I
3. Generator's Name and Mailing Address	145 00 8391145	7 43 8 5 5	of Year or year	The second second
ELECTRONIC CHRO	MAIDIQUISIA 9132 DICE 5-1 MA PE 512.	Rd NAS CA		
4. Generator's Phone (-214 GIII-	1.691	90570		
Generator's Phone (-216 946- Transporter 1 Company Name	6. US EPA ID Number		1012	
7. Transporter 2 Company Name	19N6 MC CALDIOLOID 8. US EPA ID Number	428U3L		
			frame of the same	
Designated Facility Name and Site Address ETICAM	10. US EPA ID Number			
SOAS NEWLYNDS	, DR		y y mara a mara a	
FRENIEW NEV BO		1957 3319		
11. US DOT Description (including Proper Ship	ping Name, Hazard Class, and ID Number)	12. Containers No. Type	13. Total Quantity	14. Unit
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WAAR BARAGAR .	The Charles of the		- American	
10. OFFICENCION 3 CENTIFICATION: DELEGA	TE FECTIFICATIVE (1)	- deduce - de	PESOIA	
packed, marked, and labeled, and are in al	respects in proper condition for transport by I	e runy and according to applicable :	above by proper ship federal, state and int	pping name and are classifie ernational laws.
If I am a large quantity generator, I certify	that I have a program in place to reduce	المراجعة المعادلة الم		
threat to human health and the environment	or OR, if I am a small quantity generator I h			
waste management method that is available Printed/Typed Name	to me and that I can afford.	- Anna Islin sitely to		
JOYCE GILLAM	\bigcirc	u Dilla)	Month Day
17. Transporter 1 Acknowledgement of Receipt of Printed/Typed Name				1010
MIKE BEINES	Signature 12/2	a. (-)-		Month Day
18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		The Cape of		
ringa/iypaa name	Signature			Month Day
19. Discrepancy Indication Space		<u></u>		
20. Facility Cwner or Operator Certification of re	eceipt of hazardous materials covered by this	manifest except as nated in Item	19.	
Printed/Typed Name	Signature			Month Day
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10. Form R

EPCRA Reporting Center

Attn: Toxic Chemical Release Inventory

P.O. Box 3348

Merrifield, VA 22116-3348

RE: Electronic Chrome & Grinding Co., Inc. TRI Facility I.D. # 90670LCTRN9132D EPA I.D. # CAD008391427

Dear Sir or Madam:

I am writing to you regarding EPA Form R reporting. Electronic Chrome & Grinding Company, Inc. is in the business of hard chrome plating (SIC 3471). We have been purchasing chromium trioxide (CrO₃), 1,1,1-trichloroethane (1,1,1-TCA), and methyl ethyl ketone (MEK) for our production use. We realized just recently that a 10,000 lbs reporting criteria is set for "each" listed toxic chemicals.

Our chemical purchase records for 1990, 1991, and 1992 are summarized in the following table. The weight in lbs of each listed chemicals is also listed. Chrome metal contributes only 52% of the total weight of CrO₃. The specific gravity of the 1,1,1-TCA and MEK is 1.325 and 0.826, respectively.

		C	hemical Purchase	Record		
Year	Chrome		1,1,1-TCA		MEK	
	CrO ₃ (lb)	Chrome (lb)	Volume (gal)	Weight (lb)	Volume (gal)	Weight (lb)
1990	8,858	4,606	440	4,862	80	552
1991	12,000	-6,240	495	5,470	80	552
1992	11,000	5,720	440	4,862	110	759

Based upon our records, it is our conclusion that we are exempt from Form R reporting requirements. We are, therefore, respectfully requesting to voluntarily withdraw from EPA's Form R reporting program.

If you have any questions regarding this letter, please feel free to call me.

Very truly yours,

Mike Reed Vice President and General Manager

cc Stephen Hanna, Chief
Office of Environmental Information
California Environmental Protection Agency
555 Capitol Mall, Suite 235
Sacramento, CA 95814

11. Source Reduction Plan

Electronic Chrome & Grinding Company, Inc. Source Reduction Plan

- Use of polyballs and fume suppressant to reduce the amount of chrome released to the atmosphere.
- 2. Reduce the amount of 1,1,1-Trichloroethane used.
- 3. Use closed-loop waste water treatment system to eliminate sewer discharge.
- 4. Recycle all spent solvent.

12. Tank Certification